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09/921,233	08/01/2001	Christian Knopfle	60,500-072	6017

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HOWARD & HOWARD ATTORNEYS, P.C.  
THE PINEHURST OFFICE CENTER, SUITE #101  
39400 WOODWARD AVENUE  
BLOOMFIELD HILLS, MI 48304-5151

EXAMINER
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PHILOGENE, PEDRO

ART UNIT	PAPER NUMBER
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3733

DATE MAILED: 12/06/2005

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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 09/921,233  
Filing Date: August 01, 2001  
Appellant(s): KNOPFLE ET AL.

**MAILED**  
**DEC 06 2005**  
**Group 3700**

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William H. Honaker  
For Appellant

**EXAMINER'S ANSWER**

Art Unit: 3733

This is in response to the appeal brief filed 09/19/05 appealing from the Office action mailed 12/29/2004.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

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No evidence is relied upon by the examiner in the rejection of the claims under appeal.

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1,6, 10,11, 29-31, 38-41,44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Manthrop et al. (5,916,217).

With respect to claims 1, 29-31, 38-41 Manthrop et al disclose a self-retaining implant for attaching a bone cover or a bone fragment to a skull, the implant (110) comprising a support element (112,118) having an upper side and a lower side an extension (124) extending substantially at a right angle from the lower side of the support element to an end remote from the support element and substantially straight between the support element and the end; at least one spike (132) such that the spike can be driven laterally into the bone cover or bone fragment prior to positioning the bone cover or bone fragment adjacent to the skull; as set forth in column 3, lines 32-57; as best seen in Fig. 3; wherein the support element comprises two support arms; as best seen in FIG.3, extending in opposite direction from the extension (124) with the first of the two support arms defining a screw hole therein for receiving a fastener (140) to

secure the first support arm to the skull after the spike has been driven laterally into the bone cover or bone fragment and after positioning the bone cover or bone fragment adjacent to the skull and the second of the two support arms for cooperating with the bone cover or bone fragment when driving the spike laterally into the bone cover or bone fragment; as set forth in column 3, lines 32-57.

It is noted that Manthrop et al did not teach of at least one spike extending substantially parallel to the support element, as claimed by applicant. However, Manthrop et al teach of a spike forming an angle with the extension. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to reach the 90 degrees angle, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. In re Aller, USPQ 233; or discovering an optimum value of a result effective variable involves only routine skill in the art. In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

With respect to claim 6, Manthrop et al discloses an implant wherein the spike extends from an end of the extension remote from the support element; as best seen in FIG.3.

With respect to claim 44, the method steps, as set forth, would have been obviously carried out in the operation of the device, as set forth above.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Manthrop et al. (5,916,217) in view of Hair (6,197,037).

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With respect to claim 5, it is noted that Manthrop et al did not teach of a lower side of the support having a concave or spherically curved at least in section; as claimed by applicant. However, in a similar art, Hair evidences the use of a fastener having a concave or spherically curved lower side to tightly engage the outer surface of the bone and promote gripping action.

Therefore, given the teaching of Hair, it would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the curved lower surface of the device of Hair in the device of Manthrop et al. side to tightly engage the outer surface of the bone and promote gripping action.

Claims 10, 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Manthrop (5,916,217) in view of Hair (6,197,037) in view of Pohndorf et al. (5,904,683).

With respect to claim 10, it is noted that the above combination of references did not teach of a support element having a thickness increasing in the direction of the screw hole; as claimed by applicant. However, Pohndorf et al. evidence the use of a support element having a thickness increasing in the direction of the screw hole to strengthen the support element for receiving a screw and stabilize a bone.

Therefore, given the teaching of Pohndorf et al., it would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the increasing thickness of Pohndorf et al in the support element of Manthrop/Hair to strengthen the support element for receiving a screw and stabilize a bone.

With respect to claim 11, Pohndorf et al teach a screw hole that is spherically curved, as best seen in FIG.11.

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**(10) Response to Argument**

Applicant's arguments with respect to claims 1,5,6,10,11,29-31,38-41,44 have been considered but are moot in view of the new ground(s) of rejection, as set forth above.


**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Pedro Philogene

  
Primary Examiner

December 01, 2005

(571) 272-4716

Conferees:

Eduardo Robert





Gene Mancene

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William H. Honaker

The Pinehurst Office Center, Suite 101

39400 Woodward Avenue

Bloomfield Hills, MI 48304-5151

(248) 723-0422